

Amendment to the Claims

Claims 1 - 22. (Cancelled)

23. (previously presented) A method for the treatment of anxiety and/or depression and/or circadian rhythm disorders which comprises administration of an effective amount of a compound selected from: (a) a VR2 polypeptide; (b) a compound which modulates the activity of a VR2 polypeptide; (c) a polynucleotide encoding a VR2 polypeptide; or (d) an antisense polynucleotide to a polynucleotide encoding a VR2 polypeptide, to a patient in need of such treatment.

24. (previously presented) A method of Claim 23 wherein said anxiety is a disorder selected from panic disorder with or without agoraphobia, agoraphobia without history of panic disorder, specific phobias, social phobias and obsessive-compulsive disorders.

25. (previously presented) A method of Claim 23 wherein said anxiety is a disorder selected from anxiety disorders induced by alcohol, amphetamines, caffeine, cannabis, cocaine, hallucinogens, inhalants, phencyclidine, sedatives, hypnotics, anxiolytics and other substances, and adjustment disorders with anxiety.

26. (previously presented) A method of Claim 23 wherein said depression is a disorder selected from single or recurrent major depressive episodes, with or without psychotic features, catatonic features, melancholic features, atypical features or postpartum onset and, in the case of recurrent episodes, with or without interepisode recovery and with or without seasonal pattern.

27. (previously presented) A method of Claim 23 wherein said depression is a disorder selected from dysthymic disorder with early or late onset and with or without atypical features; dementia of the Alzheimer's type, with early or late onset, with depressed mood; vascular dementia with depressed mood; mood disorders induced by alcohol, amphetamines, cocaine, hallucinogens, inhalants, opioids, phencyclidine, sedatives, hypnotics, anxiolytics and other substances; schizoaffective disorder of the depressed type; and adjustment disorder with depressed mood.

28. (previously presented) A method of Claim 23 wherein said depression is the result of a general medical condition selected from myocardial infarction, diabetes, miscarriage and abortion.

29. (previously presented) A method of Claim 23 for achieving a circadian rhythm phase-shifting effect in a mammal.

30. (previously presented) A method of Claim 23 for resetting the internal circadian clock in a mammal.

31. (previously presented) A method of Claim 23 for shortening the time of reentrainment of circadian rhythms in a mammal.

32. (previously presented) A method of Claim 23 for enhancing or improving sleep I quality and/or preventing and/or treating sleep disorders and sleep disturbances in a mammal.!

33. (previously presented) A method of Claim 23 for increasing sleep efficiency and augmenting sleep maintenance in a mammal.

34. (previously presented) A method of Claim 23 for the prevention or treatment of a circadian rhythm disorder in a mammal, which disorder is selected from the group consisting of: time- zone change (jet-lag) syndrome, shift-work sleep disorder, delayed sleep-phase syndrome, advanced i sleep-phase syndrome, and non-24-hour sleep- wake disorder.

35. (previously presented) A method of Claim 23 for the prevention or treatment of a circadian rhythm disorder in a mammal, which disorder is selected from the group consisting of Disorders of Initiating and Maintaining Sleep (insomnias) ("DIMS"), childhood onset DIMS, nocturnal myoclonus and restless legs and non specific REM disturbances as seen in ageing.

36. (previously presented) A method for the treatment of pre-term labour, erectile dysfunction, hypertension and/or eclampsia, and associated disorders or schizophrenia which comprises administration of an effective amount of a compound selected from: (a) a VR2 polypeptide; (b) a compound which modulates the activity of a VR2 polypeptide; (c) a polynucleotide encoding a VR2 polypeptide; or (d) an antisense polynucleotide to a polynucleotide encoding a VR2 polypeptide, to a patient in need of such treatment.

37. (previously presented) A method of Claim 36 for the treatment of pre-term labour, erectile dysfunction, hypertension and/or eclampsia, and associated disorders.

38. (previously presented) A method of Claim 36 inducing myometrial relaxation, preventing pre-term labour, stopping labour, and/or treating or preventing dysmenorrhea.

39. (previously presented) A method of Claim 36 for the treatment or prevention of erectile dysfunction and/or impotence.

40. (previously presented) A method of Claim 36 for the treatment or prevention of hypertension and/or congestive heart failure, inducing diuresis, and/or inhibiting platelet agglutination.

41. (previously presented) A method of Claim 36 for the treatment or prevention of pre-eclampsia and/or eclampsia.

42. (previously presented) A method of Claim 36 wherein the compound which modulates the activity of a VR2 polypeptide is an antagonist.

43. (amended) A method of Claim 23 ~~or 36~~ wherein the compound which modulates the activity of a VR2 polypeptide is an antagonist.

44. (amended) A method of Claim 23 ~~or 36~~ wherein the compound is a VR2 polypeptide which comprises a polypeptide having at least 95% identity to the VR2 polypeptide of SEQ ID NO: 2.

45. (previously presented) A method of Claim 44 wherein the compound is the VR2 polypeptide of SEQ ID NO: 2.

46. (amended) A method of Claim 23 ~~or 36~~ wherein the compound comprises a polynucleotide encoding a polypeptide having at least 95% identity with the amino acid sequence of SEQ ID NO: 2.

47. (previously presented) A method of Claim 46 wherein the polynucleotide 2 comprises a polynucleotide having at least 95% identity with the polynucleotide of SEQ ID NO: 1.

48. (amended) A method of Claim ~~46 or~~ Claim 47 wherein the polynucleotide has the polynucleotide sequence of SEQ ID NO: 1.

49. (New) A method of Claim 36 wherein the compound which modulates the activity of a VR2 polypeptide is an antagonist.

50. (New) A method of Claim 36 wherein the compound is a VR2 polypeptide which comprises a polypeptide having at least 95% identity to the VR2 polypeptide of SEQ ID NO: 2.

51. (New) A method of Claim 50 wherein the compound is the VR2 polypeptide of SEQ ID NO: 2.

52. (New) A method of Claim 36 wherein the compound comprises a polynucleotide encoding a polypeptide having at least 95% identity with the amino acid sequence of SEQ ID NO: 2.

53. (New) A method of Claim 52 wherein the polynucleotide 2 comprises a polynucleotide having at least 95% identity with the polynucleotide of SEQ ID NO: 1.

54. (New) A method of Claim 53 wherein the polynucleotide has the polynucleotide sequence of SEQ ID NO: 1.